

# KT-57

## INSTRUCTION MANUAL

KENWOOD

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### Introduction

Your choice of this product indicates that you are a devotee to excellence in sound reproduction. We appreciate your patronage and take pride in the long tradition of quality components. So that you can get the most out of your unit, we suggest that you take the time to read through this manual before you hook up and operate your system. This will acquaint you with operating features, and system-connection considerations, so that your listening pleasure will be enhanced right from the start. You will notice that in all aspects of planning, engineering, styling, operating convenience and adaptability, we have sought to anticipate your needs and desires.

Keep this manual handy for future reference.

### For your records

Record the serial number, found on the back of the unit, in the spaces designated on the warranty card, and in the space provided below. Refer to the model and serial numbers whenever you call upon your dealer for information or service on this product.

Model KT-57 Serial Number \_\_\_\_\_

### Unpacking

Unpack the unit carefully and make sure that all accessories and cables are put aside so they will not be lost. Examine the unit for any possibility of shipping damage. If your unit is damaged, or fails to operate, notify your dealer immediately. If your unit was shipped to you directly, notify the shipping company without delay. Only the consignee (the person or company receiving the unit) can file a claim against the carrier for shipping damage. We recommend that you retain the original carton and packing materials for use should you transport or ship the unit in the future.

### Note to CATV system installer:

This reminder is provided to call the CATV system installer's attention to Article 820 – 22 of the NEC that provides guidelines for proper grounding and, in particular, specifies that the cable ground shall be connected to the grounding system of the building, as close to the point of cable entry as practical.

### Accessories

RCA Pin plug cord .....	1
AM loop antenna .....	1
AM loop antenna stand .....	1
FM T shaped antenna .....	1

### Contents

Caution: Read the following pages marked in ⚠ carefully to keep your safety.

⚠ Before applying power.....	2	Controls and indicators .....	7
⚠ Safety precautions.....	2	Operating instructions .....	8
⚠ Important safeguards.....	3	In case of difficulty .....	9
System connections.....	5	Specifications.....	10

## Before applying power

### Important!

#### U.S.A., Canada and Australia

Units shipped to the U.S.A. Canada are designed for operation on 120 V AC only.

Units shipped to Australia are designed for operation on 240 V AC only.

These units are not equipped with an AC voltage selector switch and the discussion of such a switch that follows, should be disregarded.

#### All other countries

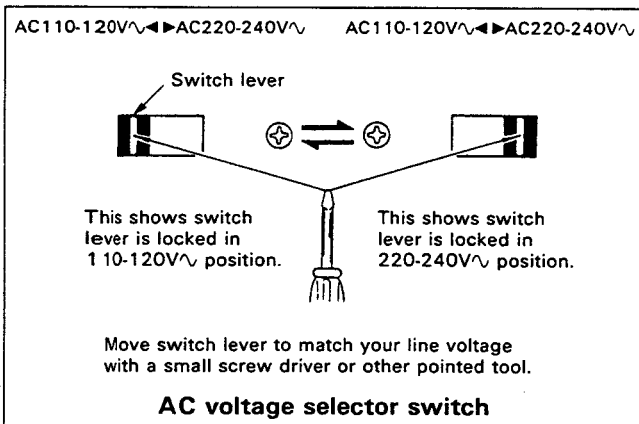
Units shipped to countries other than the above countries are equipped with an AC voltage selector switch on the rear panel. Refer to the following paragraph for the proper setting of this switch.

### AC voltage selection

These units operates on 110-120 volts or 220-240 volts AC. The AC voltage selector switch of the amplifier is set to the voltage that prevails in the area to which the units was shipped. Before connecting the power cord to your AC outlet, make sure that the setting position of this switch matches your line voltage. If not, it must be set to your voltage in accordance with the following direction.

#### Note:

Our warranty does not cover damage caused by excessive line voltage due to improper setting of the AC voltage selector switch.







## Safety precautions

### Safety precaution for AC plug (For U.S.A. and Canada)

**CAUTION:** TO PREVENT ELECTRIC SHOCK DO NOT USE THIS (POLARIZED) PLUG WITH AN EXTENSION CORD, RECEPTACLE OR OTHER OUTLET UNLESS THE BLADES CAN BE FULLY INSERTED TO PREVENT BLADE EXPOSURE.

### WARNING:

TO PREVENT FIRE OR ELECTRIC SHOCK, DO NOT EXPOSE THIS APPLIANCE TO RAIN OR MOISTURE.

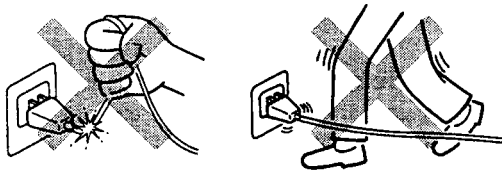
 <div data-bbox="219 1657 470 1736" style="border: 1px solid black; padding: 5px; text-align: center;"> <b>CAUTION</b>  RISK OF ELECTRIC SHOCK  DO NOT OPEN </div> 	<p>CAUTION: TO REDUCE THE RISK OF ELECTRIC SHOCK, DO NOT REMOVE COVER (OR BACK). NO USER-SERVICEABLE PARTS INSIDE. REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.</p>
	<p>THE LIGHTNING FLASH WITH ARROWHEAD SYMBOL, WITHIN AN EQUILATERAL TRIANGLE, IS INTENDED TO ALERT THE USER TO THE PRESENCE OF UNINSULATED "DANGEROUS VOLTAGE" WITHIN THE PRODUCT'S ENCLOSURE THAT MAY BE OF SUFFICIENT MAGNITUDE TO CONSTITUTE A RISK OF ELECTRIC SHOCK TO PERSONS.</p>
	<p>THE EXCLAMATION POINT WITHIN AN EQUILATERAL TRIANGLE IS INTENDED TO ALERT THE USER TO THE PRESENCE OF IMPORTANT OPERATING AND MAINTENANCE (SERVICING) INSTRUCTIONS IN THE LITERATURE ACCOMPANYING THE APPLIANCE.</p>

## Important safeguards

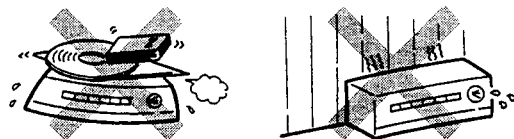
Please read all of the safety and operating instructions before operating this unit. For best results, follow all warnings placed on the unit and adhere to the operating and use instructions. These safety and operating instructions should be retained for future reference.

- 1. Power sources** – The unit should be connected to a power supply only of the type described in the operating instructions or as marked on the appliance.
- 2. Power-cord protection** – Power-supply cords should be routed so that they are not likely to be walked on or pinched by items placed upon or against them, pay particular attention to cords at plugs, convenience receptacles, and the point where they exit from the unit.

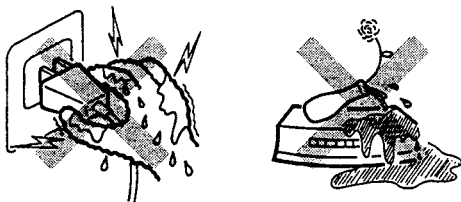
Never pull or stretch the cord.



- 3. Grounding or polarization** – Precautions that should be taken so that the grounding or polarization means of this unit is not defeated.
- 4. Ventilation** – The unit should be situated so that its location or position does not interfere with its proper ventilation. To maintain good ventilation, do not put records or a table-cloth on the unit. Place the unit at least 10 cm away from the walls. Do not use the unit on a bed, sofa, rug or similar surface that may block the ventilation openings.



- 5. Water and moisture** – The unit should not be used near water – for example, near a bathtub, washbowl, kitchen sink, laundry tub, in a wet basement, or near a swimming pool, etc.

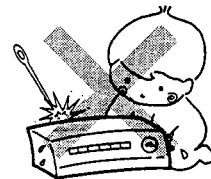


- 6. Temperature** – The unit may not function properly if used at extremely low, or freezing temperatures. The ideal ambient temperature is above +5°C (41°F).

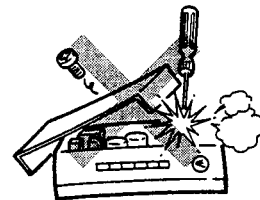
- 7. Heat** – The unit should be situated away from heat sources such as radiators, heat registers, stoves, or other units (including amplifiers) that produce heat.



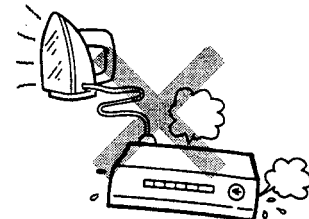
- 8. Electric shock** – Care should be taken so that object do not fall and liquid are not spilled into the enclosure through openings. If a metal object, such as a hair pin or a needle, comes into contact with the inside of this unit, a dangerous electric shock may result. For families with children, never permit children to put anything, especially metal, inside this unit.



- 9. Enclosure removal** – Never remove the enclosure. If the internal parts are touched accidentally, a serious electric shock might occur.



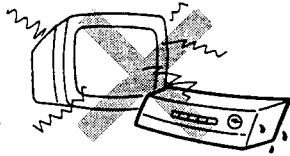
- 10. AC outlets** – Do not connect other audio equipment with a power consumption larger than that specified to the AC outlet on the rear panel. Never connect other electrical units, such as an iron or toaster, to it to prevent fire or electric shock.



The maximum capacities indicated for the AC outlets on the rear panel of the this unit are as follows.

UNSWITCHED outlets : 800W

- 11. Magnetic fields** – Keep the units away from a source of magnetic fields such as TV sets, speaker systems, radios, motorized toys or magnetized objects.



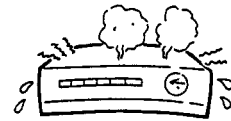
- 12. Cleaning** – Do not use volatile solvents such as alcohol, paint thinner, gasoline, benzine, etc. to clean the cabinet. Use a clean dry cloth.



- 13. Nonuse periods** – The power cord of the unit should be unplugged from the outlet when left unused for a long period of time.

- 14. Abnormal smell** – If an abnormal smell or smoke is detected, immediately turn the power OFF and pull out the power cord. Contact your dealer or nearest service station.

## POWER OFF!



- 15. Damage requiring service** – The unit should be serviced by qualified service personnel when:
- A.** The power-supply cord or the plug has been damaged; or
  - B.** Objects have fallen, or liquid has been spilled into the unit; or
  - C.** The unit has been exposed to rain; or
  - D.** The unit does not appear to operate normally or exhibits a marked change in performance; or
  - E.** The unit has been dropped, or the enclosure damaged.

- 16. Servicing** – The user should not attempt to service the unit beyond that described in the operating instructions. All other servicing should be referred to qualified service personnel.

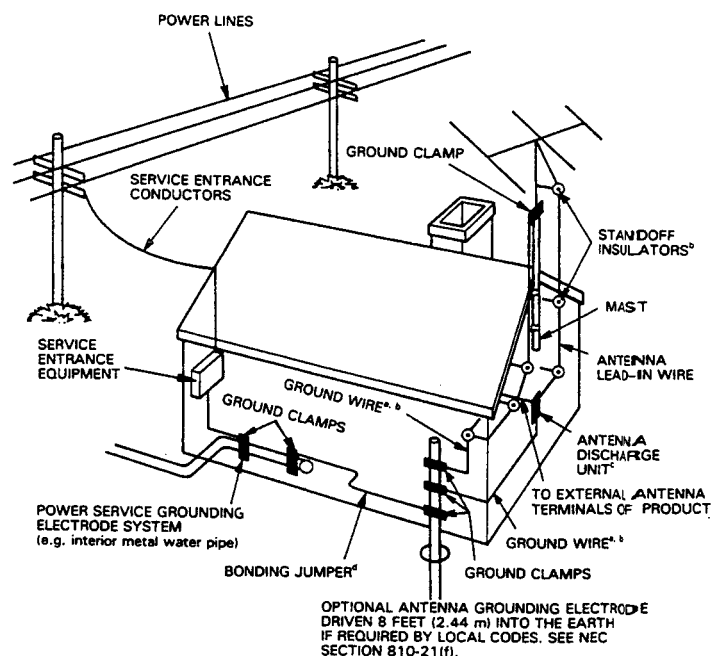
- 17. Outdoor antenna grounding** – If an outside antenna is connected to the receiver, be sure the antenna system is grounded so as to provide some protection against voltage surges and built up static charges. Section 810 of the National Electrical Code, ANSI/NFPA No. 70 – 1984, provides information with respect to proper grounding of the mast and supporting structure, grounding of the lead-in wire to an antenna discharge unit, size of grounding conductors, location of antenna-discharge unit, connection to grounding electrodes, and requirements for the grounding electrode. See Figure.

<sup>a</sup> Use No.10 AWG (5.3 mm<sup>2</sup>) copper, No.8 AWG (8.4 mm<sup>2</sup>) aluminum, No.17 AWG (1.0 mm<sup>2</sup>) copper-clad steel or bronze wire, or larger, as a ground wire.

<sup>b</sup> Secure antenna lead-in and ground wires to house with stand-off insulators spaced from 4 – 6 feet (1.22 – 1.83 m) apart.

<sup>c</sup> Mount antenna discharge unit as close as possible to where lead-in enters house.

<sup>d</sup> Use jumper wire not smaller than No.6 AWG (13.3 mm<sup>2</sup>) copper, or the equivalent, when a separate antenna-grounding electrode is used. See NEC Section 810-21(j).



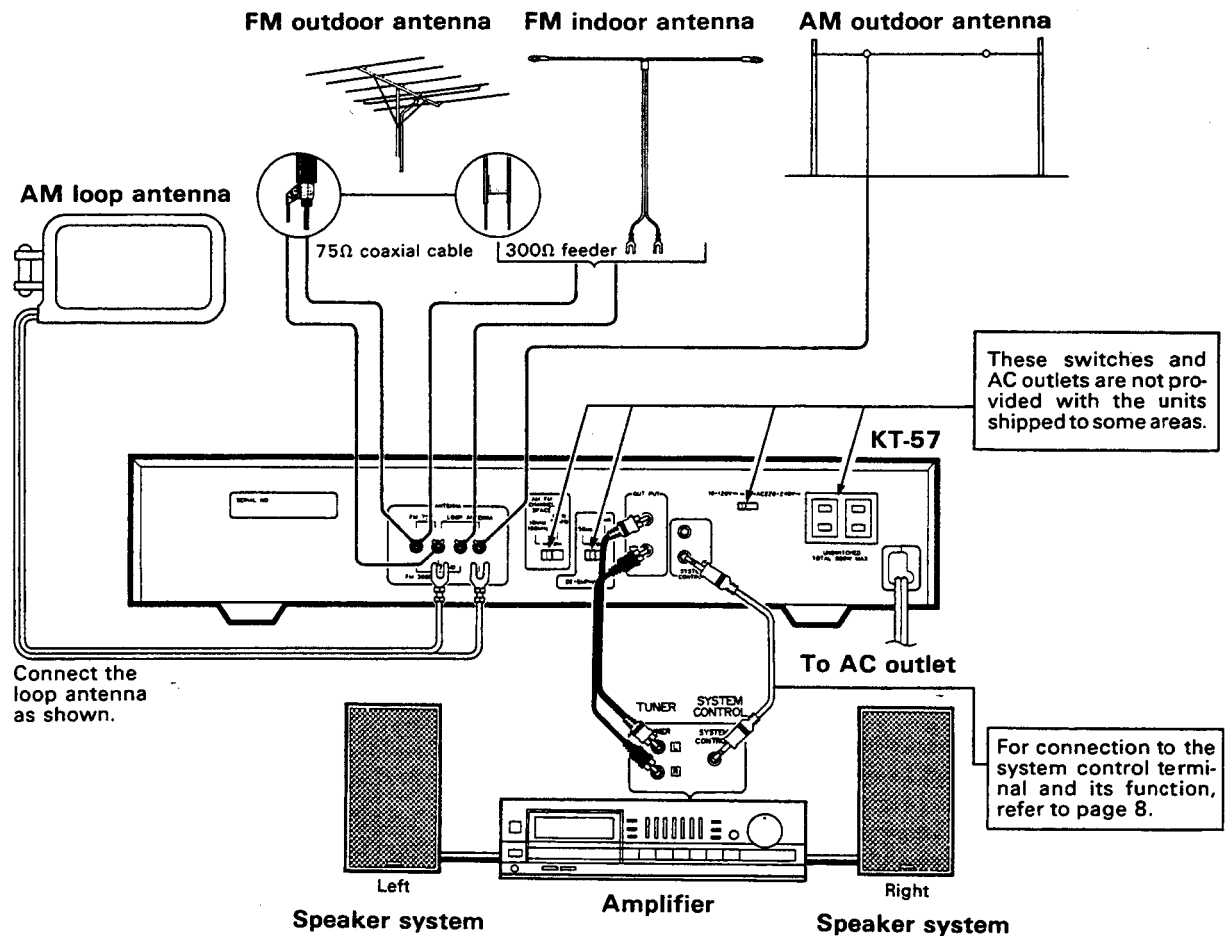
**FIGURE**  
**EXAMPLE OF ANTENNA GROUNDING ACCORDING TO**  
**THE NATIONAL ELECTRICAL CODE INSTRUCTIONS**  
**CONTAINED IN ARTICLE 810 –“RADIO AND**  
**TELEVISION EQUIPMENT”**

- 18. Power lines** – An outdoor antenna should be located away from power lines.

### Notes:

1. Item 3 is not required except for grounded or polarized equipment.
2. Item 10 is not required except for units provided with AC outlets.
3. Item 17 and 18 are not required except for units provided with antenna terminals.

# System connections



## Output

Signals from the output jacks are fed to the amplifier. Connection cables should be plugged to the amplifier TUNER or AUX jacks. Shielded cables terminated at both ends with standard phono plugs are supplied with this tuner.

## AC outlet (except for Australia)

The AC outlets on the rear panel can be used to supply power to other components in the system. Never connect equipment whose power consumption exceeds the maximum value shown at each outlet.

UNSWITCHED (except some models): The outlet provides power when the unit is plugged into an active AC wall outlet, regardless of the setting of the POWER switch. The maximum capacity is total 800W.

## Ground

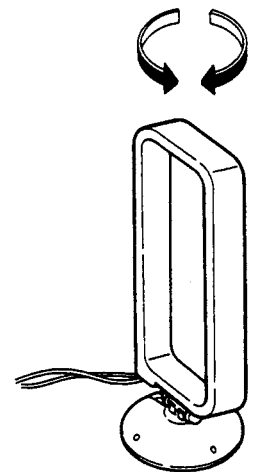
For maximum safety and minimum interference connect the GND terminal to a good earth ground if practicable. A good earth ground is a cold water pipe or a metal stake driven into moist earth. However, never use a gas pipe for this purpose.

## AM antennas

### AM loop antenna

Install the AM loop antenna to the supplied loop antenna stand and place them on a shelf, etc., or install them in the rack or wall with screws.

Rotate the AM loop antenna to the right or left for best reception.



loop antenna stand

Keep the speaker leads and AC cord away from the AM loop antenna.

## Note:

Do not place the AM loop antenna on the unit. As this unit employs computing device, placing the AM loop antenna on the unit may result in noise generation. Place the AM loop antenna away from the unit.

### AM outdoor antenna

In steel buildings or at a great distance from the transmitter, it may be necessary to install an outside long wire antenna. The end of this wire should be stripped of insulation and connected to the AM terminal. At this time, keep the loop antenna connected.

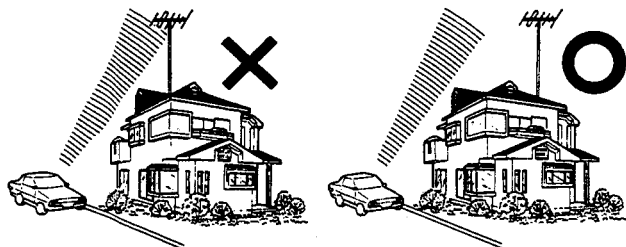
### FM antenna

Your tuner approaches the theoretical limit in FM sensitivity. However, the performance of your system is determined to a very large extent upon the signal conditions where the antenna is placed. The reason is that FM broadcast signals travel in straight paths. Therefore they can be blocked by natural or man-made obstructions such as mountains, hills or buildings. At large distances from the transmitter the curvature of the earth acts as a screen between the transmitter and receiver.

Consider the signal conditions in planning your installation. If you live in or near an urban area the indoor antenna (supplied) may serve your needs adequately. However, if desired stations are weak due to natural obstructions, or if you live in a building which is made of steel-reinforced concrete (which acts as a shield) it may be necessary to install a good outdoor antenna.

### FM outdoor antenna

Consult with your dealer or service man about the best method of selecting and erecting an outdoor FM antenna. The choice of lead-in (feeder) wire is also important. The flat ribbonshaped twin lead performs well electrically, is cheaper and is somewhat easier to handle in routing through windows and around rooms. Coaxial cable is more expensive, does a much better job of minimizing interference, is less prone to the effects of weather and close-by metal objects, and is nearly as good a signal conductor as the ribbon type wire. The latter is particularly true of foam-type coaxial cables. Coaxial cable is somewhat more difficult to install at the point where the cable enters the building. If coaxial cable is selected, make sure the antenna is designed to drive that type of cable.



- To minimize auto-ignition noise, locate the antenna as far from heavy traffic as possible.
- Keep the feeder or coaxial cable as short as possible. Do not bundle or roll up excess cable.
- The antenna should be at least two meters (6.6 feet) from reinforced concrete walls, or metal structures.

### FM outdoor antenna installation

#### Note:

Do not connect both the 300 $\Omega$  feeder and 75 $\Omega$  coaxial cable to the FM antenna terminal.

### FM indoor antenna

Connect the T-shaped indoor antenna (supplied) to the 300 $\Omega$  FM ANTENNA terminals as shows in the System connections diagram. Spread the two arms that form the top of the "T" horizontally and hold them against convenient wall surfaces. Try several locations for best results on your desired stations. Tape the antenna in place where the best compromise is found between listening results and appearance.

### FM DE-EMPHASIS switch (rear panel)

(This switch is not provided to the units for some areas.)

This switch has been set to the correct position for a given market area. However, check to see that this switch is set correctly before operating your tuner. An incorrect setting will adversely affect high frequency performance. (The FM DE-EMPHASIS switch is not equipped with units shipped to Oceania.)

Europe and Oceania .....	50 $\mu$ s
Other countries .....	75 $\mu$ s

### AM/FM CHANNEL SPACE switch (rear panel)

(This switch is not provided to the units for some areas.)

The CHANNEL SPACE switch on the rear plate is set to the correct setting that prevails in the area to which the unit is shipped. However, if the channel space setting is not matched to the area where the tuner is to be used; for instance, when you moved from area 1 to area 2 or vice versa, desired broadcasts cannot be received. In this case, change the CHANNEL SPACE setting in accordance with the area corresponding to the table shown below.

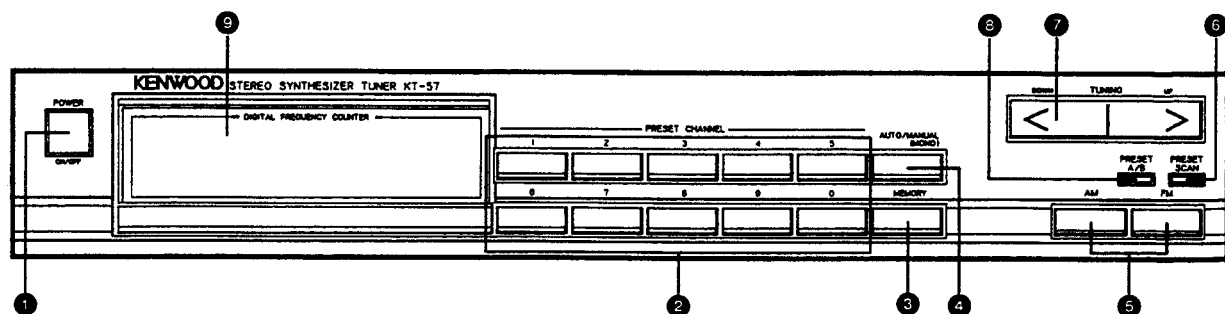
Area	Channel Space Frq	
1 U.S.A., Canada Hawaii, and Guam	FM:	100 kHz
	AM:	10 kHz
2 European countries Far East countries	FM:	50 kHz
	AM:	9 kHz

Channel Space Table

#### Notes:

1. Operate the AM/FM CHANNEL SPACE switch after plugging out the power cord from the AC outlet.
2. To reset the switches equipped on the rear panel, slide the switch to the opposite side with a screwdriver or other pointed tool.

# Controls and indicators



## 1 POWER switch

Press this switch to supply power. Press the switch again to turn the power off.

## 2 PRESET CHANNEL key

One AM or FM station can be stored in each PRESET CHANNEL key. When the key is pressed, the stored frequency is displayed in the digital frequency counter. Press the MEMORY key, and then press one of the PRESET CHANNEL keys within 5 seconds.

## 3 MEMORY key

When this key is pressed, the MEMORY indicator lights and the unit stands by for preset station memory.

## 4 Tuning mode (AUTO/MANUAL) key

Press this key to select the tuning mode between AUTO or MANUAL. In MANUAL mode, an FM stereo broadcast is received in monaural.

## 5 Band selector (AM, FM) switches

Press to select receiving band.

## 6 PRESET SCAN key

When the PRESET SCAN key is pressed, the station memorized in the preset channel is received for 5 seconds, then the station memorized in the next preset channel is received.

When the desired station is tuned in, press the PRESET SCAN key again.

## 7 TUNING (DOWN, UP) key

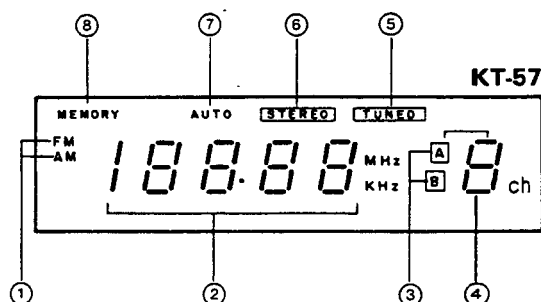
**AUTO-tuning:** When the UP or DOWN side is pressed, the frequency automatically increases or decreases until the next station of sufficient signal strength is reached.

**MANUAL (MONO) tuning:** Each time the UP or DOWN side is pressed, the displayed frequency increases or decreases. When either side of the button is held down, the displayed frequency will continue to increase or decrease until the button is released.

## 8 PRESET A/B selector switch

10 preset channels, CH1 to 0, are provided for each Side A and side B, allowing to preset up to 20 channels in total.

## 9 DIGITAL FREQUENCY COUNTER and channel display



## 1 Band indicators

Indicates the reception band.

## 2 Frequency display

Displays the receiving frequency.

## 3 PRESET A/B selector indicator

Indicates preset side A or B.

## 4 PRESET CHANNEL indicators

When the PRESET CHANNEL key is pressed, the corresponding number of the PRESET CHANNEL is displayed.

## 5 TUNED indicator

Lights when the station is turned in correctly.

## 6 STEREO indicator

Lights when the FM stereo broadcast with a sufficient signal strength is received.

## 7 AUTO indicator

Lights when the tuning mode is set to AUTO with the TUNING MODE button.

## 8 MEMORY indicator

Lights for about 5 seconds when the MEMORY key is pressed in tuning mode.

# Operation instructions

## ■ Auto tuning

1. Set the input selector of the amplifier to TUNER.
2. Press the POWER switch.  
The DIGITAL FREQUENCY COUNTER lights and the frequency of the last station\* is displayed.
3. Set the tuning mode key to AUTO.
4. For AM reception, press the AM key of the FM/AM selector switches. The AM indicator in the digital frequency counter lights.  
For FM reception, press the FM key of the FM/AM selector switches. The FM indicator in the digital frequency counter lights.
5. Press the UP or DOWN side of the TUNING key.  
The unit starts scanning the selected band and the scanning stops when a station is received.
6. Adjust the volume and tone with the amplifier.

### \* Last station

As the memory of this unit is backed up, the frequency received before the power is turned off is memorized. This is referred to as the last station frequency. When the power is turned on again, the unit tunes in to the last station frequency.

#### Note:

If an AM station and an FM station have been memorized in the same preset channel, the frequency of the last station received may not be correctly retained in the memory.

## ■ Manual tuning

1. Set the input selector of the amplifier to TUNER.
2. Press the POWER switch.  
The DIGITAL FREQUENCY COUNTER lights and the frequency of the last station\* is displayed.
3. Set the tuning mode key to MANUAL (MONO).
4. For AM reception, press the AM key of the FM/AM selector switches. The AM indicator in the digital frequency counter lights.  
For FM reception, press the FM key of the FM/AM selector switches. The FM indicator in the digital frequency counter lights.
5. Tune in to the requires station with TUNING key.
6. Adjust the volume and tone with the amplifier.

## ■ Preset tuning

1. Receive a station (AM/FM).
2. Press the MEMORY switch.
3. Press one of the PRESET CHANNEL keys within 5 seconds.  
The PRESET CHANNEL indicator lights up to show that the station is preset.  
Perform the same procedures on other PRESET CHANNEL keys. Up to 20 stations (AM/FM) can be randomly preset.  
To receive the preset station, press the corresponding PRESET CHANNEL key.

→ A-1 → A-2 ..... A-9 → A-0 → B-1 → B-2 ..... B-9 → B-0 →

To release this function, press the PRESET SCAN again.

## ■ Preset scan

Each station in the PRESET CHANNEL memories will be received (monitored) for 5 seconds sequentially. When the station in the PRESET CHANNEL is being received, scanning starts from the next PRESET CHANNEL station. If not, scanning will start from the station preset in the A-1 channel.

## ■ System control terminal

A system control terminal is provided on the rear panel, allowing the remote control of the tuner when the jack is connected to the system control terminal on the amplifier. For the remote control range and control method, please refer to the instruction manual of an amplifier equipped with the system control terminal (KC-207, for example).



## In case of difficulty

If your tuner should not perform as expected, consult the table below to see if the problem can be corrected before seeking help from your dealer or service representative.

General	Possible case	Remedy
The station stored in the PRESET CHANNEL key is erased.	The memory is not backed up due to poor power cord connection.	Connect the power cord securely to the AC outlet. When the power cord is connected to the amplifier switched AC outlet or timer, the memory contents are retained for only about 3 days.
Occurs during AM reception only	Possible cause	Remedy
High-frequency especially at night.	Interference from TV set. Beats from adjacent AM station.	Turn off TV set, if problem disappears try relocating TV set. Impossible to eliminate, but try HIGH filter of your amplifier.
Intermittent buzz or cracking sound.	Lightning. Fluorescent lamps starting. Appliance or furnace starting.	No remedy. Try reversing AC plug. Try reversing AC plug.
Occurs during FM reception only	Possible cause	Remedy
Hiss that gets worse in stereo reception.	Very weak antenna input signal.	Consider an outdoor antenna installation. In areas remote from the transmitter a 5 to 8 element antenna designed exclusively for FM is suggested.
Rhythmic static or popping noises.	Automobile ignition noise, especially evident when receiving weak signals.	Review antenna installation. Site the antenna as far from the street as possible and use coaxial cable.
STEREO indicator fails to light during stereo broadcast.	Another possible effect of a very weak signal.	Antenna system needs attention (see above).

# Specifications

## KT-57

### FM Tuner Section

Tuner frequency range.....	87.5 MHz – 108 MHz
Antenna impedance.....	300 ohms balanced 75 ohms unbalanced
<b>Sensitivity</b>	
Usable sensitivity (IHF): MONO.....	0.95 $\mu$ V (10.8 dBf)
50 dB quieting sensitivity (IHF)	
Mono.....	3.0 $\mu$ V (14.7 dBf)
Stereo:.....	49 $\mu$ V (39.0 dBf)
<b>Total harmonic distortion</b>	
Mono: (75 kHz Dev.)	
1,000 Hz.....	0.30%
50 Hz ~ 10,000 Hz.....	0.50%
Stereo: (75 kHz Dev.)	
1,000 Hz.....	0.30%
50 Hz ~ 10,000 Hz.....	0.70%
<b>Signal-to-Noise ratio</b>	
Mono: (75 kHz Dev.) 65 dBf input.....	76 dB
85 dBf input.....	77 dB
Stereo: (75 kHz Dev.) 65 dBf input.....	72 dB
85 dBf input.....	74 dB
<b>Capture ratio.....</b>	1.2 dB
<b>Alternate channel selectivity</b>	
IHF: $\pm$ 400 kHz.....	50 dB
<b>Stereo separation</b>	
1,000 Hz.....	40 dB
50 Hz ~ 10,000 Hz.....	35 dB
<b>Frequency response</b>	
30Hz ~ 15,000 Hz.....	+0.5 dB, -2.0 dB
<b>Image rejection ration (98 MHz).....</b>	50 dB
<b>IF rejection ration (98 MHz).....</b>	95 dB
<b>Spurious rejection ration (98 MHz).....</b>	100 dB
<b>AM suppression ratio.....</b>	95 dB
<b>Sub-carrier suppression ratio.....</b>	37 dB
<b>Output level/impedance</b>	
at 1,000 Hz, 100% Dev.....	0.6 V/3.3 kohms

### AM Tuner section

Tuning frequency range.....	531 kHz – 1,602 kHz (9 kHz step) 530 kHz – 1,610 kHz (10 kHz step)
Usable Sensitivity.....	14 $\mu$ V (400 $\mu$ V/m)
Signale-to-Noise ratio	
(30 % Mod; 1 mV input).....	50 dB
Total harmonic distortion.....	0.5%
Image rejection ratio.....	40 dB
Selectivity (IHF).....	25 dB
Output level/impedance 400 Hz, at 400 Hz, 30% mode.....	0.18V/3.3 kohms

### GENERAL

Power Consumption.....	9 W
Dimensions.....	W: 420 mm (16-9/16") H: 65 mm (2-9/16") D: 251 mm (9-7/8")
Weight (Net).....	2.8 kg (6.2 lb)

**Note:** \_\_\_\_\_  
We follow a policy of continuous advancements in development. For this reason specifications may be changed without notice.

KENWOOD